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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/275,273	03/23/1999	FRANK P. HART	42390.P5368	9527

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EXAMINER

MYERS, PAUL R

ART UNIT PAPER NUMBER

2112

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/275,273	HART ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul R. Myers	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-21 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-21 and 24-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 1/25/06 have been fully considered but they are not persuasive.

In regards to applicants argument that the examiner has not properly established the inherency of the "load" in Shintomi: Shintomi shows an output power source, if you have an output power source it must have a purpose. However, Shintomi expressly states the that voltage from the regulator is supplied to the power line (9) to activate the controller (1), (Column 4 lines 11-13) and that the controller 1 is supplied with power to be activated (Column 3 lines 64-65). Thus controller (1) of Shintomi is clearly a "load" of power line (9).

In regards to applicants argument that the voltage regulator (7) provides power to the batteries (10): This is clearly incorrect. The voltage regulator (7) provides power to the controller (1). The examiner notes that while the regulators are within the controller, the function of the controller is to generate a charging control signal at terminal (14) to turn on switch (12) so that adapter (2) can charge the batteries (10) (Column 3 line 49-51) and to supply a signal to terminal (15) to activate the discharging line (13), so that the batteries are discharged (keeps from overcharging see Column 3 lines 52-57).

In regards to applicants argument that since the batteries are the load in Shintomi the batteries cannot be the first power source: The batteries "first power source" are the power source for regulator (7). Shintomi expressly states (Column 2 lines 6-9) it is an object of the present invention to provide a secondary battery discharging apparatus in which even when there is no power from the AC adapter, the controller can be operated to control discharging. The AC

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adapter “second power source” is the power source for regulator (6). The fact that the first power source is a load to the second power source when the controller decides to activate the charging switch is immaterial to the fact that Shintomi teaches a first regulator (7) powered by a first power source (10) and a second regulator (6) powered by a second power source. Shintomi also teaches the second regulator (6) providing power based upon the availability of the second power source.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 103 and 105. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not

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accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. The examiner notes for the record that support for the battery and AC adapter was found on both pages 7 and 11, and support for the docking station was found on page 13.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "107" has been used to designate both Storage device 107 and Docking station 107. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 19-21, 24, 27, 29-31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burstein et al PN 6,268,716 in view of Shintomi PN 5,598,089.

In regards to claims 19 and 29: Burstein et al teaches a primary voltage regulator (the first 16 and 18 taken together) to provide primary power to a load (14) from a power source (12) the primary voltage regulator having a feedback circuit (18) to detect power supplied to the load and to control any additional voltage regulators (The additional 16's); and a secondary voltage regulator (the next 16) to selectively provide additional power to the load from the power source. Burstein et al does not teach a first and second power source and the second voltage regulator providing additional power based at least in part on the availability of the second power source. Shintomi teaches an apparatus (figure 1) comprising: a primary voltage regulator (7) to provide primary power (output of 7) to a load (inherent) from at least one of a first power source (10) or a second power source (2); and a second voltage regulator (6) to selectively (based upon the presence of the source 2) provide additional power (output of 6) to the load from the second power source (2) based at least in part on the availability of the second power source (Column 3 line 35 to Column 4 line 14). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide separate power sources and activate the additional regulators based on the availability of a line AC because this would have allowed for an uninterruptible power supply (UPS). Alternatively it would have been obvious to provide feedback to a controller in the system of Shintomi because this would have allowed for greater power output control.

In regards to claim 20: Shintomi teaches the first power source comprises a battery (10) and the second power source comprises an alternating current (AC) line adapter (2).

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In regards to claims 21, 30 and 33: Burstein teaches the feedback circuit in the primary voltage regulator to control the secondary voltage regulator to provide the additional power if a load power reaches a threshold level. Shintomi teaches supplying power from the second voltage regulator is second power is available.

In regards to claims 24 and 31: Burstein teaches a tertiary voltage regulator to detachably couple with the load (disabled), said tertiary voltage regulator to selectively provide further additional power to the load from the power source. Shintomi teaches providing power based upon availability of the power source.

In regards to claim 27: Burstein teaches a feedback network to couple to the load, the primary voltage regulator, the secondary voltage regulator, and the tertiary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a load power reaches a first threshold level and the second power source is available, and to control the tertiary voltage regulator to provide the further additional power if the load power reaches a second threshold level and both the tertiary voltage regulator and the second power source are available.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Burstein PN 6,268,716 as applied to claim 24 further in view of Yanagisawa PN 6,078,109.

In regards to claim 25: Shintomi and Burstein teach general purpose power supplies and is silent upon possible locations for the regulators. Yanagisawa teaches a mobile computer

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(100), said mobile computer containing the primary voltage regulator (12), and the load (13); and a docking station to detachably receive the mobile computer (200), said docking station containing the tertiary voltage regulator (22). Shintomi teaches the secondary voltage regulator,

7. Claims 26, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Burstein et al PN 6,268,716 and Yanagisawa PN 6,078,109 as applied to claim 25 further in view of Tracy PN 6,191,943.

In regards to claims 26 and 32: Yanagisawa does not teach thermal heat dissipation for the docked third voltage regulator. Tracy teaches active heat dissipation for the docked notebook. It would have been obvious to add heat dissipation because this would have protected the notebook from overheating.

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Burstein PN 6,268,716 as applied to claim 24 and further in view of Norris PN 5,630,148.

In regards to claim 28: Burstein teaches a variable load. Burstein however is silent as to the type of load. Norris teaches a load that has at least a low performance mode, a medium performance mode. and a high performance mode.

9. Claims 19-21, 24, 27, 29-30, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Shintomi PN 5,598,089 in view of Bates PN 3,521,150



In regards to claims 19, 29: Shintomi teaches an apparatus (figure 1) comprising: a primary voltage regulator (7) to provide primary power (output of 7) to a load (inherent) from at least one of a first power source (10) or a second power source (2); and a second voltage regulator (6) to selectively (based upon the presence of the source 2) provide additional power (output of 6) to the load from the second power source (2) based at least in part on the availability of the second power source (Column 3 line 35 to Column 4 line 14). Bates teaches a feedback network (Voltage response circuit) coupled to a load and a plurality of regulators (6 regulators) to control the additional voltage regulators to provide additional power if a load power reaches a threshold (Figure 2). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a feedback for switching on additional regulators because this would have allowed for handling greater load requirements.

In regards to claim 20: Shintomi teaches the first power source comprises a battery (10) and the second power source comprises an alternating current (AC) line adapter (2).

In regards to claims 21, 30, 33: Shintomi teaches the plural voltage regulators as described above. Shintomi does not teach a feedback network coupled to the load, the primary voltage regulator, and the secondary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a load power reaches a threshold level. Bates teaches a feedback network (Voltage response circuit) coupled to a load and a plurality of regulators (6 regulators) to control the additional voltage regulators to provide additional power if a load power reaches a threshold (Figure 2). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a feedback for switching on additional regulators because this would have allowed for handling greater load requirements.

In regards to claim 24: Bates teaches a tertiary voltage regulator to detachably couple with the load, said tertiary voltage regulator to selectively provide further additional power to the load from the power source. Shintomi teaches providing power based upon availability of the power source.

In regards to claim 27: Bates teaches a feedback network to couple to the load, the primary voltage regulator, the secondary voltage regulator, and the tertiary voltage regulator, said feedback network to control the secondary voltage regulator to provide the additional power if a load power reaches a first threshold level and the second power source is available, and to control the tertiary voltage regulator to provide the further additional power if the load power reaches a second threshold level and both the tertiary voltage regulator and the second power source are available.

10. Claims 25, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Bates PN 3,521,150 as applied to claim 24 further in view of Yanagisawa PN 6,078,109.

In regards to claim 25: Shintomi teaches a general purpose power supply and is silent upon possible locations for the regulators. Yanagisawa teaches a mobile computer (100), said mobile computer containing the primary voltage regulator (12), and the load (13); and a docking station to detachably receive the mobile computer (200), said docking station containing the tertiary voltage regulator (22). Shintomi teaches the secondary voltage regulator,

In regards to claim 31: Yanagisawa teaches a detachable voltage regulator.

11. Claims 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Bates PN 3,521,150 and Yanagisawa PN 6,078,109 as applied to claim 25 further in view of Tracy PN 6,191,943.

In regards to claims 26, 32: Yanagisawa does not teach thermal heat dissipation for the docked third voltage regulator. Tracy teaches active heat dissipation for the docked notebook. It would have been obvious to add heat dissipation because this would have protected the notebook from overheating.

12. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shintomi PN 5,598,089 in view of Bates PN 3,521,150 as applied to claim 24 and further in view of Norris PN 5,630,148.

In regards to claim 28: Bates teaches a variable load. Bates however is silent as to the type of load. Norris teaches a load that has at least a low performance mode, a medium performance mode, and a high performance mode.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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14. This is an RCE of applicant's earlier Application No.09/275,273. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

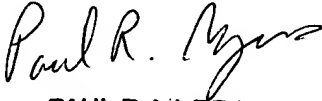
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 571 272 3639. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRM  
April 10, 2006

  
**PAUL R. MYERS**  
**PRIMARY EXAMINER**